REMARKS

Claims 1-3, 6, 8 and 12-26 are pending in the present application. Claims 1, 6, 8, 17, 22 and 23 have been amended. Claims 1, 6, 8, 17, 22 and 23 are independent claims. Claims 7 and 11 have been cancelled and rewritten as additional claims 25 and 26 to more clearly depend from preceding claims.

Claim Rejection Under 35 U.S.C. § 103

Claim 1-3, 12-13 and 17-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Alleged Admitted Prior Art in view of Waldron (U.S. Patent No. 6,021,425). Claims 8, 11, 15, 16, 23 and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Alleged Admitted Prior Art in view of Waldron et al., and further in view of Farrell et al. (U.S. Patent No. 5,247,675). Claims 6, 7, 14 and 22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Alleged Admitted Prior Art in view of Waldron et al., and further in view of Saulpaugh et al. (U.S. Patent No. 5,734,903). These rejections are respectfully traversed.

The Examiner has ignored Applicant's repeated traversal of this rejection based upon Applicant's own patent application, i.e., the Examiner has apparently relied upon the entirety of pages 1-4 of Applicant's own application

as qualifying under 35 U.S.C. § 102. Accordingly, this rejection is improper and should be withdrawn. Applicant submits that the subject matter relied upon by the Examiner as admitted prior art has not been admitted by Applicant as qualifying under 35 U.S.C. § 102. Further, even if the subject matter of Applicant's own patent application relied upon by the Examiner as being prior art did qualify under 35 U.S.C. § 102, Applicant submits that this rejection would still be improper and should be withdrawn.

For example, with respect to claim 1, Applicant submits that the prior art of record fails to teach or suggest the combination of limitations of the claimed invention, including the feature(s) of: *"wherein all of said tasks are queued and prioritized within said waiting-list for the event; checking a validity of an event ID for thereby generating an error code in the case of validity when the kernel system function of receiving the event starts; and returning the routine from the kernel system function;* wherein in the case that the event transfer occurs, the task having the highest priority in the waiting-list obtains the event, is activated and an execution of said highest priority task is resumed *and when transferring the event, the method further includes checking whether any waiting task exists in the waiting-list for the event."* (emphasis added). Accordingly, this rejection should be withdrawn.

With respect to claims 17, Applicant submits that the prior art of record fails to teach or suggest the combination of limitations of the claimed invention, including the feature(s) of: *"wherein all of said tasks are queued and prioritized within said waiting-list for the event*; checking whether any waiting task exists in the waiting-list for the event when transferring the event; and transferring an event value to the head task of the waiting-list when said checking indicates that the waiting task exists in the waiting-list; and wherein when the kernel system function of receiving the event starts, the method further includes checking a validity of an event ID to thereby generate an error code in the case of invalidity; and returning the routine from the kernel system function."* (emphasis added). Accordingly, this rejection should be withdrawn.

The Examiner has withdrawn the previous rejections based upon the Alleged Admitted Prior Art and the Farrell reference. The new alleged combination advanced by the Examiner is based upon the Waldron patent and the alleged Admitted Prior Art (APA). However, Applicant submits that the Examiner has admitted that this combination of Waldron and APA fails to teach or suggest the features identified hereinabove with respect to claims 1 and 17. In order to cure this deficiency, the Examiner has alleged that Farrell et al. (hereinafter, Farrell) or Saulpaugh et al. (hereinafter, Saulpaugh) teach or suggest the missing features.

However, Applicant respectfully submits that the alleged combinations of the prior art of record would not have been obvious to one of ordinary skill in the art and should be withdrawn. Without conceding the propriety of the Examiner's rejection, but merely to expedite the prosecution of the present application, Applicant has amended claim 1 to include the features of original claim 6 and original claim 8 and has amended claim 17 to include the features of original claims 22 and 23.

The Examiner has alleged that the features of original claim 6 and 22 are taught or suggested by Saulpaugh. The Examiner has also alleged that the features of original claim 8 and 23 are taught by Farrell. Applicant submits that the combination of these features in original claims 1 and 17 has not been shown in the prior art of record.

With respect to the Farrell reference, the Examiner has already seemingly agreed that this reference fails to teach Applicant's unique prioritized waiting-list. Specifically, Applicant's have previously argued that it is improper to equate Farrell's run list to Applicant's waiting-list of the *event* because Farrell's run list queues therein only those threads with the highest priority from each dispatch class. Therefore, Farrell's *run list* is not analogous to the waiting-list of the claimed invention. In contrast, Applicant's waiting-list of the event

stores therein all the tasks (and not just the highest priority tasks) when no event is provided to the tasks.

The Examiner has alleged on page 5 of the most recent Office Action that "Farrell teaches the steps of the checking indicates that the waiting task exists (determines if the thread is already on the run list, col. 6, lines 15-20), transferring an event value to the head task of the waiting-list (the current thread is a highest priority on the run list, col. 5, lines 15-47)." However, Applicant submits that Farrell clearly indicates in the Abstract of the Disclosure that

> The highest priority thread on the run list is executed first. While this thread is dispatchable and being executed, *no other thread from the same dispatch class can preempt it unless this executing thread voluntarily relinquishes control of the processor, even if the other thread has a higher priority.*

The Examiner is reminded that Farrell's run list clearly *does not* store or queue all the tasks from each dispatch class. Farrell, including the specific portions cited by the Examiner, clearly do not disclose that its run list queues all the tasks from each dispatch class. Farrell clearly emphasizes that only the highest priority thread from each dispatch class is queued on the run list 32 for execution (e.g., see column 4, lines 40-42; Abstract). This is clearly different than the waiting-list of the claimed invention of claims 1 and 17. Accordingly, this rejection should be withdrawn.

Specifically, when a Thread Create function 15 is called to create each thread in Farrell, a thread having the structure as shown in Fig. 2 is created and stored in the system. This structure identifies the priority level of the task. However, the run list 32 does not store all the threads created and stored in the system, but only stores the highest priority thread from each dispatch class. As such, Farrell nowhere discloses inserting each of the tasks into a waiting-list of the event in priority order when no event is provided to the tasks, as in Applicant's claimed invention. In fact, Farrell does not disclose "a waiting-list of the event" and Farrell's run list for storing only the highest priority tasks cannot be equated to Applicant's waiting-list of the event. Accordingly, this rejection should be withdrawn.

Applicant submits that Farrell's alleged checking for existing tasks on the non-analagous run list does not render the claimed invention obvious. Further, the Examiner's alleged motivation to alter the Waldron and APA on page 5 does not appear anywhere in the Farrell reference and appears to be the unsubstantiated opinion of the Examiner. Specifically, the Examiner's allegation that it would have been obvious to combine Farrell's system "because Farrell's checking for existing task would provide a sufficient scheduling without wasting time and memory to run an empty queue" (page 5 of the Office Action) is not found anywhere in the references. Accordingly, this

alleged motivation to alter the alleged Prior Art is respectfully traversed as being unsupported by any of the references themselves and should be withdrawn.

With respect to the Saulpaugh et al. reference, Applicant submits that this reference is unrelated to multi-tasking through the use of prioritized waiting-lists. Although the Examiner has attempted to show "checking a validity of an event ID for thereby generating an error code in the case of validity when the kernel system function of receiving the event starts," the alleged analogous portion of Saulpaugh is not related to prioritized waiting lists for multi-tasking. Applicant respectfully submits that the Examiner has attempted a piecemeal reconstruction of the claimed invention by showing the various features of the claimed invention in several different references. However, Applicant submits that neither Saulpaugh or Farrell et al. teach the modifications proposed by the Examiner as being beneficial to systems such as Waldron or the claimed invention.

Therefore, Applicant respectfully traverses the Examiner's opinion as to why one of ordinary skill in the art would modify the APA and Waldron references to include the features of Saulpaugh or Farrell. Applicant requests that the Examiner provide actual evidence from the prior art references

themselves to substantiate the alleged motivations advanced by the Examiner on pages 5 (paragraph 4) and 7 (paragraph 24) of the most recent Office Action.

As to the dependent claims, Applicant submits that these claims are allowable due to their dependence upon an allowable independent claim and for the additional limitations provided therein.

CONCLUSION

For the foregoing reasons, Applicant respectfully requests the Examiner to reconsider and withdraw all of the rejections of record, and earnestly solicits an early issuance of a Notice of Allowance.
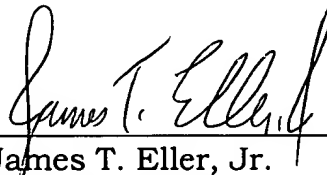
The Examiner is respectfully requested to enter this Response After Final Rejection in that it reduces the issues for appeal.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew T. Shanley (Registration No. 47,074) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASH & BIRCH, LLP

By _James T. Eller, Jr._
James T. Eller, Jr.
Reg. No. 39,538

JTE/MTS/cl

P.O. Box 747
Falls Church, VA 22032-0747
(703) 205-8000